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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,167	09/25/2003	Robert Porter Cross	MUL-0005-D1	7015

7590 08/24/2004  
MULE LIGHTING, INC.  
46 Baker Street  
Providence, RI 02908

EXAMINER
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VU, JIMMY T

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/671,167

Applicant(s)

CROSS ET AL.

Examiner

Jimmy T Vu

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 7-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Timmermans (U.S. Patent Application Publication number US 2002/0060526 A1).

Regarding claim 1, Timmermans discloses an LED light tube (20) for replacement of a fluorescent light tube, the LED light tube comprising:

an elongated, cylindrical transparent envelope (24);

a base cap (26, 28) at each end of the envelope, wherein the base cap comprises a first prong and a second prong extending from the base cap; and

at least one serial string of LEDS (22) in electrical communication with the base cap having circuitry means (56, 100) for connection with an AC source through a nondissipative voltage dropping element, wherein each one of the at least one serial string of LEDS are connected in parallel with the other and are enclosed in the envelope (Figs. 1-10; page 1, col. 2, lines 28-67, page 2, col. 1, lines 1-35).

Regarding claim 2, Timmermans discloses the LED light tube wherein the at least one serial string of LEDS comprises a plurality of organic light emitting diodes (Figs. 1 and 2).

Regarding claim 3, Timmermans discloses the LED light tube wherein the at least one serial string of LEDS comprises spacedly stacked circuit boards, wherein each one of the circuit boards include a plurality of serially connected LEDS mounted thereon (Figs. 1 and 2).

Regarding claim 4, Timmermans discloses a troffer LED light tube fixture (20) comprising:

a housing comprising a tube holder (24), wherein the tube holder comprises electrical sockets (40) adapted to receive and electrically communicate an LED light tube; and

an LED light tube disposed in the tube holder, wherein the LED light tube comprises an elongated, cylindrical transparent envelope (24), a base cap (26, 28) at each end of the envelope, wherein the base cap comprises a first prong and a second prong extending from the base cap, and at least one serial string of LEDS (22) in electrical communication with the base cap having circuitry means for connection with an AC source through a nondissipative voltage dropping element, wherein each one of the at least one serial string of LEDS are connected in parallel with the other and are enclosed in the envelope (Figs. 1-10; page 1, col. 2, lines 28-67, page 2, col. 1, lines 1-35).

Regarding claim 5, Timmermans discloses the troffer LED light tube fixture wherein the housing further inherently comprises a reflective material disposed on a surface of the housing for maximizing the light output.

Regarding claim 6, Timmermans discloses the troffer LED light tube fixture wherein the at least one serial string of LEDS comprises a plurality of organic light emitting diodes (Figs. 1 and 2).

### ***Allowable Subject Matter***

3. Claims 7-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the prior art teaches the troffer LED light tube wherein the means for protection against a voltage surge comprises a varistor positioned in parallel with the at least one serial string of LEDs.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy T Vu whose telephone number is (571) 272-1832. The examiner can normally be reached on M - F: 9 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2800.

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Art Unit: 2821

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Jimmy Vu

August 13, 2004

  
Don Wong  
Supervisory Patent Examiner  
Technology Center 2800